

What is claimed is:

1. An electrochemical sensor, comprising:
  - a substrate having a surface, said surface having at least one notch for holding gas;
  - an electrolytic material extending over said surface and spaced apart from said surface and said notch for providing an electrical connection; and
  - 5 a film of conductive material placed between and in contact with both said surface and said electrolytic material for defining a passage for receiving gas.
2. The electrochemical sensor according to claim 1, wherein said electrolytic material is not in contact with said at least one notch.
3. The electrochemical sensor according to claim 1, wherein a second film of conductive material is deposited on at least one area of said at least one notch.
4. The electrochemical sensor according to claim 1, wherein said substrate is an electrically insulating material.
5. The electrochemical sensor according to claim 1, wherein said substrate is glass.
6. The electrochemical sensor according to claim 1, wherein said film is a metallic material.
7. The electrochemical sensor according to claim 1, wherein said electrolytic material is a polymer.
8. The electrochemical sensor according to claim 1, wherein said electrolytic material is in a solid state.

9. The electrochemical sensor according to claim 1, wherein said at least one notch is etched.

10. The electrochemical sensor according to claim 1, wherein said electrolytic material is Nafion.

11. The electrochemical sensor according to claim 3, wherein a second electrolytic material is placed in contact with said second film.

12. The electrochemical sensor according to claim 11, wherein said second electrolytic material is spin coated on said second film.

13. An electrochemical sensor, comprising:

5 a substrate having a surface, said surface having at least one notch for holding gas;

a first electrolytic material extending over said surface and spaced

10 apart from said surface and said notch for providing an electrical connection;

a first film of conductive material placed between and in contact with both said surface and said first electrolytic material for defining a passage for receiving gas; and

15 a second film of conductive material deposited on at least one area of

10 said notch.

14. The electrochemical sensor according to claim 13, wherein a second electrolytic material is placed in contact with said second film.

15. The electrochemical sensor according to claim 13, wherein said at least one notch is etched.

16. An electrochemical sensor, comprising:

a substrate having a surface, said surface having at least one notch for holding gas;

- 5      a first electrolytic material extending over said surface and spaced apart from said surface and said notch for providing an electrical connection;
- a first film of conductive material placed between and in contact with both said surface and said first electrolytic material for defining a passage for receiving gas;
- 10     a second film of conductive material deposited on at least one area of said notch; and
- a second electrolytic material placed in contact with said second film.

17. The electrochemical sensor according to claim 16, wherein said second electrolytic material is spin coated on said second film.

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